

Work Order ID 55439

January 18, 2010 3:08:07 PM

Page 1

Item ID: D2258-146

Revision ID:

Item Name: Placard

Start Date: 1/18/10 Start Qty: 20.00

Required Date: 1/19/10 Req'd Qty: 20.00

Reference:

Approvals:

Process Plan: *u*

Date:

Tooling:

Date:

Run Start

QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

Draw Nbr

Revision Nbr

D2258

PER D

01.01.22

100

0.00

Purchasing

Memo

0.00

Purchasing

Issue P/O: *11159*

E-mail or Ship electronic file and or dwg to vendor

Manufacture as per Dwg and supplied files

Possible supplier: Studio Letrage

Material release note is required.

u 12401.18

110

Receive & Inspect for Damage & Mat'l Certs

0.00

Packaging

Memo

0.00

Packaging

1/21/10

Dart Aerospace Ltd

W/O: 55439		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
10.01.22	100	ACCEPTABLE TO ADD "DZZ58-146" WITH " MAXIMUM DISTRIBUTED LOAD " 146 lb / 66 kg				CP 10.01.22 per OSI 042	S 10/01/22

Part No: D2258-146 PAR #: _____ Fault Category: Supplier NCR: Yes ~~No~~ DQA: 1 Date: 10-02-10
 Resolution: Accepted Disposition: Use-AS-IS QA: N/C Closed: 10/02/11 Date: 10/02/11

NCR: 55439		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
10.01.22	100	WIDTH OF LABEL IS 16.5" INSTEAD OF 21.0"	CP 10.01.22 per OSI 042	ACCEPTABLE. CONFORMS TO PREVIOUSLY ACCEPTED PLACARDS	CP 10.01.22 per OSI 042	S 10/01/22	CP 10.01.22 per OSI 042	S 10/01/22

NOTE: Date & initial all entries

Work Order ID 55439

January 18, 2010 3:08:08 PM



Item ID: D2258-146

Accept



Setup Start



Revision ID:

Stop



Item Name: Placard

Start Date: 1/18/10 Start Qty: 20.00



Cust Item ID:

Required Date: 1/19/10 Req'd Qty: 20.00



Customer:

Reference:

Run Start



Approvals: Process Plan:

Date:

Tooling:

Date:

Stop



QC:

Date:

SPC (Y/N):

Date:

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

120

QC6- Inspect dimensions to drawing

0.00



QC

Memo

0.00

Quality Control

20.00/1.19
UP 10.01.22

(420)

130

Identify as per dwg & Stock Location: 303

0.00



Packaging

Memo

0.00

Packaging

10-1-22 20- 4

140

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

10/01/22

POSITIVE RECALL
EFFECTIVE 10.01.22
RELEASED 10.01.22

DATE 10.01.22 MK 10-1-22

ACCEPTABLE BASED
ON ENG APPROVAL
TO EXISTING DWG
& ICA
UP 10.01.22

Picklist Print

January 18, 2010 3:08:07 PM

Work Order ID: 55439

Parent Item: D2258-146




Parent Item Name: Placard

Comments: IPP RevA: new issue DD 10.01.18 verified by:EC

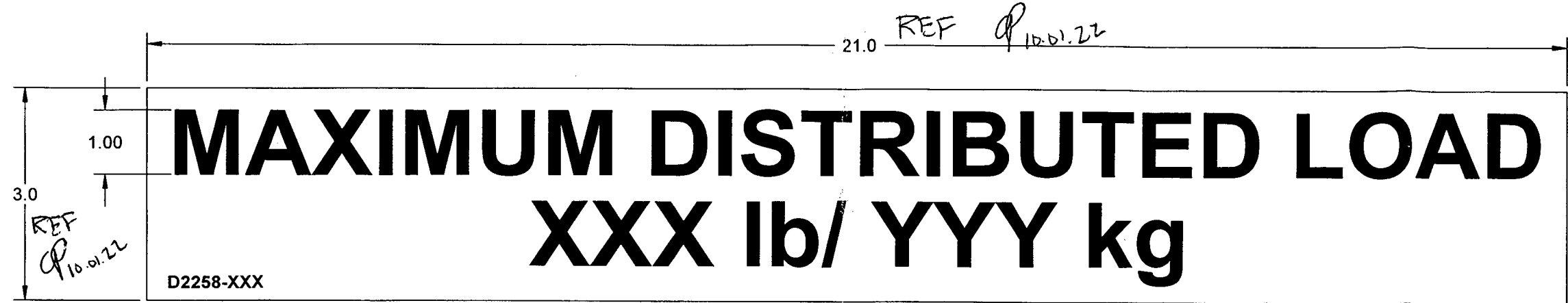
Start Date: 1/18/10**Required Date:** 1/19/10

Start Qty: 20.00

Required Qty: 20.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D2258-146P		Purchased	No			110	Each	0.0000	20.0000			
												
Placard												

mf 10-1-22



8 **D2258-XXX PLACARD**
(XXX = ALLOWABLE WEIGHT IN POUNDS)

PART NUMBER	LOAD
D2258-132	132 lb/ 60 kg
D2258-160	160 lb/ 73 kg
D2258-170	170 lb/ 77 kg
D2258-176	176 lb/ 80 kg
D2258-200	200 lb/ 91 kg
D2258-220	220 lb/ 100 kg
D2258-300	300 lb/ 136 kg

D2258-146 146 lb/ 66 kg P 10.01.22

RELEASED
09/07/06/11

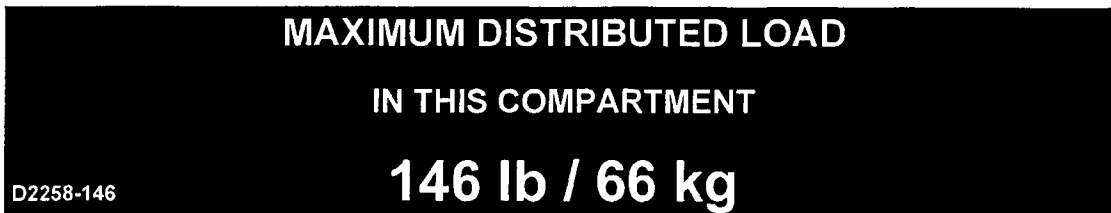
NOTES:
1) MATERIAL: RED LETTERS, 1 HIGH, ADHESIVE BACK
MANUFACTURED FROM 3M, 7 MIL MASKING FILM #8522CP OR
AVERY IPM #2031
2) FINISH: N/A
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: N/A
6) IDENTIFICATION: N/A
7) WEIGHT: N/A
8) PART NUMBER = D2258-MAX DISTRIBUTED WEIGHT IN POUNDS (lbs) OF THE BASKET.
EXAMPLE: D2258-132 IS A BASKET WITH MAX DISTRIBUTED WEIGHT OF 132 POUNDS (lbs).

D	ADD P/N D2258-176		09.06.03
C	REDRAWN. SEE PAR 08-026	AJS	08.10.29
B	ADDED NOTE	BW	95.11.29
A	NEW ISSUE	BW	94.02.28
REV.	DESCRIPTION	BY	DATE
DESIGN	BW	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN			
CHECKED		DRAWING NO.	REV. D
MFG. APPR.		D2258	SHEET 1 OF 1
APPROVED		TITLE	SCALE
DE APPR.		UTILITY BASKET PLACARD	NTS
DATE	09.06.03	COPYRIGHT © 1994 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

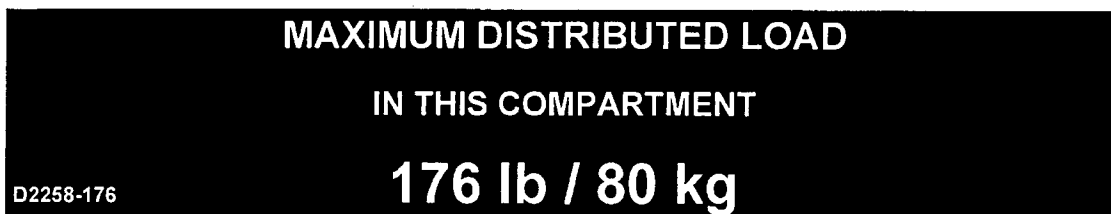
CHAPTER 11 – PLACARDS AND MARKINGS (11-00-00)

The following placards are applicable to this installation.

D2258-146 Placard: located on D3515-041 Basket Lid when installed on AW119MKII models.



D2258-176 Placard: located on D3515-041 Basket Lid when installed on A119 models.



D3519-1 Placard: located on D3515-041 Basket Lid.



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WITHOUT NOTICE
WORK ORDER
NO. 55439

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Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID PO11159

Purchase Order Date 1/18/10

PO Print Date 1/18/10

Page Number 1 of 1

Order From :

VC-STU001

STUDIO DE LETTRAGE 2001
210 MAIN WEST
HAWKESBURY, ON K6A 2H6
CA

FAKED

Contact Name

Vendor Phone

613 632 5449

Vendor Fax

613 632 9491

Vendor Account Nbr

Buyer

Requisition Nbr

Tax Resale Nbr

10127-2607

Terms

Net 30

Currency

CAD

FOB

Ship To :

DART AEROSPACE LTD

1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

Line Nbr	Reference Revision ID Vendor Part Number	Description/ Mfg ID	Req Date/ Taxable	Req Qty/ Unit of Measure	Ship Method	Unit Price	Extended Price
1	D2258-146P	Placard	1/19/10 Yes	20.00 Each	Yours ppd	\$7.5000	\$150.00

Special Inst: Per drwg D2258 Rev. PE1
Red letters, 1" high, adhesive back
manufacture from 3M, 7mil masking film
#8522CP or Avery # 2031

PO Total:

\$150.00

Change Nbr:

1

Change Date: 1/18/10

No substitution or deviation without
consent.
Certificate of Conformity or Material
Certification required when applicable

Merci! Thank You!



PRODUCT DATA BULLETIN

Product Data Bulletin: A5-O

Avery Graphics™ A5 Opaque
5-year **INTERMEDIATE** calendered vinyl film
Dated: 10/3/02

Description:

Avery Graphics™ A5 Opaque intermediate films are flexible, high-gloss calendered vinyls designed for use on computer sign cutting equipment. This construction provides excellent cutting, weeding and transferring characteristics for signage applications.

Application information can be found in the Avery Graphics Application Guide.

For surface preparation, converting and printing, and application and removal instructions, please refer to the Avery Graphics Instructional Bulletin.

Construction:

- Face Film: 3.2 mils opaque medium gloss intermediate calendered vinyl film
- Adhesive: 1.0 mil clear acrylic permanent solvent pressure-sensitive adhesive
- Liner: 78# bleached white kraft

Physical Properties:

The following information on physical and chemical characteristics is based upon tests believed to be reliable. The values are intended only as a source of information. They are given without guarantee and do not constitute a warranty. The purchaser should independently determine, prior to use, the suitability of this material for his/her specific purpose. (Data represents averages and is not intended for use as a specification).

- Outdoor durability: 5 years when properly processed and applied (vertical exposure, unprinted film)**
- Application surface contours: Flat and simple curves
- Minimum surface and air application temperature: +50° F (10° C)
- Service Temperature Range: -40° F to +180° F (-40° C to 82° C) (Reasonable range of temperatures which would be expected under normal environmental time and temperature conditions)
- Typical Chemical Resistance: Resistant to most mild acids, alkalis and salt solutions. See instructional bulletin for recommendations on cleaning.
- Shelf Life: One year when stored at the following temperatures and humidity conditions: 68°-77° F (20° - 25° C) and 50±5% R. H.
- Typical Adhesion Values: **180° Peels**

Substrate	24 hrs	1 week
Stainless Steel	4.4 lbs/in	5.1 lbs/in
Glass	4.7 lbs/in	5.3 lbs/in

NOTE: Tested per ASTM D 1000. Always pre-test your specific substrate prior to actual application.

- Reflectivity: NA
- Typical Gloss*: 70 at 60°

Avery Graphics™ A5 Opaque page 1 of 2
AnswerLine: 800-443-9380
Signage.averygraphics.com



Scotchcal™

Opaque Imaging Media 8522

Product Bulletin 8522

Release F, Effective January 2003
Black bar in margin indicates a change

Description

This media is specially formulated to dry quickly after printing. Production of outdoor weatherable and long-term indoor durable graphics is now easier than ever. Its changeable adhesive allows easy removal for up to one year.

Advantages

- Optimized for use with selected Epson Stylus Pro printers and Epson Archival inks.
- Optimized for use with selected HP DesignJet Printers and HP DesignJet Ink System UV or HP83UV Color Ink System
- For making opaque, laminated graphics that are outdoor weatherable and long-term indoor durable
- Media:
 - For opaque (reflective) graphics
 - Changeable, easy to remove from warranted substrates up to 1 year later
 - Dries quickly after printing so the overlamine can be applied almost immediately
 - Low slippage paper liner for superior tiling
- Overlaminates:
 - Provide additional UV (ultraviolet) and physical protection for making weatherable finished graphics
 - Available in luster and matte gloss
 - Adhesive allows for heat-assisted or cold-temperature lamination

Applications and Uses

3M™ Scotchcal™ Changeable Opaque Imaging Media 8522 is intended only for ink jet printing and for use with the listed Compatible Products and Equipment and the following applications. Any other application is NOT warranted by 3M or covered by the worldwide 3M™ MCS™ Warranty unless 3M gives its prior written approval for the application.

- First surface images (the image is on top of the film) for opaque posters and signs, including:
 - Graphics for vans, personal vehicles, trucks and buses
 - Novelty posters
 - Retail and point-of-purchase displays
 - Information graphics such as maps and directories
 - Entertainment promotions in museums, zoos, parks, theatres, sports venues
 - Education and presentation graphics

- Legal and courtroom exhibits

- For flat or simple curved surfaces, with or without rivets, used in vertical ($\pm 10^\circ$) applications

Limitations of End Uses

The following uses and applications are specifically NOT warranted.

- Fleet applications in areas that use salt for winter road maintenance
- Application to non-warranted substrates, including wall-board
- Applications subjected to gasoline vapors or spills
- Application to corrugated or highly irregular surfaces or sharply raised areas
- Graphics applied to stainless steel, including stainless steel vehicles
- On flat surfaces with rivets, tenting of 4 to 10 mm around rivets may be expected; rivets may be cut around to eliminate tenting.

Note: Standard ink jet technology is water based. Water-based chemistry is susceptible to the extremes of heat and humidity. This is a factor in most product constructions on the market. Read the Fabrication, Shelf Life and Storage sections in this bulletin. Staying in the middle of these ranges always provides optimum performance.

Compatible Products and Equipment

Thermal Ink Jet Printing Systems

- Epson Stylus Pro 9500, Stylus Pro 10000 printer
 - Epson Archival Inks
- Epson Stylus Pro 10600 printer
 - Epson Archival Inks
- HP DesignJet Printers 2000 and 3000 series
 - HP DesignJet Ink System UV (pigment-based ink)
- HP DesignJet Printers 5000 series
 - HP83UV Color Ink System

Overlaminates (required)

- 3M™ Luster Overlamine 8519 (semi-gloss)
- 3M™ Matte Overlamine 8520

Note: For the full product names of the 3M products listed on this page, please see page 1.

Warranted Substrates

Media 8522 is warranted for use on the following rigid substrates.

Some substrates may "out-gas", resulting in tiny bubbles throughout the surface of the graphic. For maximum performance, be sure the substrate you select is properly cleaned and prepared as recommended by the manufacturer. See Instruction Bulletin 5.1 for additional information.

- Alodine (anodized aluminum)
- Automotive panels (automotive painted steel)
- Fruehauf (painted aluminum)
- FRP (fiberglass reinforced plywood)
- Glass
- Imron® (polyurethane-painted metal panel)
- Acrylic
- Sintra™ board

Test and Approve Non-warranted Substrates Before Use

Media 8522 is not warranted for any substrate other than those listed above. If you want to use it for other substrates, 3M recommends that you test and approve the media for both adhesion and removal characteristics.

Characteristics

Characteristic	Description
Media	7 mil. white, opaque graphic film
Liner	Low-slippage, lay flat paper
Adhesive	Changeable, pressure sensitive
Thickness (media and adhesive)	7.5 to 8 mil (nominal)
Application substrates	See Warranted Substrates, above
Application surfaces	Flat or simple curved surfaces, with or without rivets, used in vertical ($\pm 10^\circ$) applications (no corrugations)
Application temperature range	28° to 110°F (-2° to 43°C) (air and surface)
Roll sizes	36" x 45 feet (914 mm x 13.5 m) 54" x 45 feet (1372 mm x 13.5 m)

How to Become a 3M Ink Jet Registered Fabricator

Only 3M Thermal Ink Jet Registered Fabricators are eligible to offer 3M MCS warranted graphics. In order to become certified, a fabricator must complete the requirements as specified in the 3M Ink Jet Graphics Registered Fabricator Reference Manual located on the 3M website at www.scotchprint.com

Effective Performance Life

To obtain the warranty given below, the graphics must be made according to 3M's recommendations which are detailed in the Warranty and Limited Remedies on page 3. Also see the section, Removability.

Warranted Durability

Media 8522 with Overlaminates 8519 or 8520	Epson Printers		HP Printers	
	Outdoor	Indoor	Outdoor	Indoor
Applied to Warranted Substrates	2 years	5 years	3 years	5 years

Removability

Imaging media 8522 is removable from warranted substrates for 1 year without the aid of chemical strippers or accessories. Refer to Instruction Bulletin 4.23 for additional information.

Fabrication

Graphics must be made according to 3M's recommendations which are detailed in the Warranty and Limited Remedies on page 3.

See Instruction Bulletin 4.23 for detailed fabrication, printing and mounting information.

Graphic Construction Options

Opaque (Reflective) Graphics

Opaque graphics made with imaging media 8522 require an overlaminate and an opaque substrate.

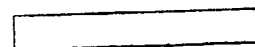
Viewer/Light Source



Overlaminates 8519, 8520
Adhesive on bottom



Imaging Media 8522
Image on top; adhesive on bottom




Opaque Substrate

Note: For the full product names of the 3M products listed on this page, please see page 1.

Shelf Life and Storage

- 3M™ Scotchcal™ Changeable Opaque Imaging Media 8522 has a shelf life of one year.
- Storage conditions (new and partially used rolls). For optimum performance, use the middle of these ranges:
 - Original packaging, including plastic wrap
 - Relative humidity of 20% to 80%
 - Temperature of 33° to 104°F (0° to 40°C)
 - Away from direct sunlight
- Do not stack unprotected rolls or lay sharp or heavy objects on them.

Health and Safety

 **Caution**

When handling any chemical products, read the manufacturers' container labels and the Material Safety Data Sheets (MSDS) for important health, safety and environmental information.

To obtain MSDS sheets for 3M products:

- By fax, call 1-800-364-0768 in the US and Canada or 1-650-556-8417 for all other locations.
- Electronically, visit us at <http://www.3M.com/msds>.
- By mail, or in case of an emergency, call 1-800-364-3577 or 1-651-737-6501.

When using any equipment, always follow the manufacturers' instructions for safe operation.

Warranty and Limited Remedies

3M™ MCS™ Warranty for Graphics Produced on HP DesignJet Printers and Epson Stylus Pro Printers

The following is made in lieu of all other express or implied warranties, including any implied warranty of *merchantability* or fitness for a particular purpose: We warrant graphics produced by a 3M Ink Jet Registered Fabricator made with imaging media 8522, printed on an approved HP thermal ink jet printer according to HP's recommendations or Epson Stylus Pro printer according to Epson's recommendations, overlaminated with 8519 or 8520, and applied to a Warranted Substrate according to 3M's recommendations. These

3M

Commercial Graphics Division
 3M Center, Building 220-6W-06
 P.O. Box 33220
 St. Paul, MN 55133-3220 USA
 General Info. 1-800-374-6772
 Technical Info. 1-800-328-3908
 Fax 1-651-736-4233

Fax-on-Demand 1-800-364-0768 U.S./Canada or 1-651-732-6506 International
 Fax-on-Demand document: 4506
www.scotchprint.com

3M Canada

P.O. Box 5757
 London, Ontario
 Canada N6A 4T1
 1-800-265-1840
 Fax 519-452-6245

graphics are covered against failure caused by ultraviolet light, temperature extremes, pollution, and other elements.

If a graphic fails to perform in accordance with 3M product specifications within this time frame, 3M will replace the materials at no charge. **These remedies are exclusive. In no case shall 3M be liable for any direct, indirect, or consequential damages, including any labor charges.**

3M Related Literature

Listed below is related 3M technical literature that may be of interest. You may view and print these Bulletins from our Web site at www.scotchprint.com, or order them via our Fax-on-Demand (FOD) system. Call one of these phone numbers to order the desired bulletins, and specify the FOD document number provided in the chart.

United States or Canada: 1-800-364-0768
 International: 1-651-732-6506

Subject	Bulletin No.	FOD No.
Product Bulletins		
3M™ Scotchcal™ Overlamine 8519 and 8520	8519/8520	4524
Instruction Bulletins		
Making thermal ink jet graphics	4.23	6523
Application, substrate selection, preparation and substrate-specific application techniques	5.1	7001
Warranties		
Worldwide 3M™ MCS™ Warranty Packet (includes all Commercial Graphics MCS Warranties)		9503
Worldwide 3M™ MCS™ Warranty Overview-Folder		9504

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 Sintra is a trademark of Swiss Aluminum Ltd.
 Imron is a registered trademark of DuPont in the United States

Bulletin Change Summary

The Epson Stylus Pro Printers 9500, 10000 10600, and Epson Archival Inks have been added to this bulletin. Additional changes resulting from this addition are marked with black bars in the margin.

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 Puerto Rico Industrial Park
 P.O. Box 100
 Carolina, PR 00986-0100
 787-620-3000
 Fax 787-750-3035

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Product Bulletin 8522 - 3